

MULTIPLEXING OF REAL TIME SERVICES AND NON-REAL TIME SERVICES FOR OFDM SYSTEMS

CROSS REFERENCE TO RELATED APPLICATIONS

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5 This application is a continuation-in-part of U.S. Patent Application
Serial No. 09/532,492, entitled "HIGH EFFICIENCY, HIGH PERFORMANCE
COMMUNICATIONS SYSTEM EMPLOYING MULTI-CARRIER
MODULATION," filed March 22, 2000, ^{now abandoned,} and U.S. Patent Application Serial No.
09/539,224, ^{U.S. Patent No. 6,473,467,} entitled "METHOD AND APPARATUS FOR MEASURING
10 REPORTING CHANNEL STATE INFORMATION IN A HIGH EFFICIENCY,
HIGH PERFORMANCE COMMUNICATIONS SYSTEM," filed March 30, 2000,
both of which are incorporated herein by reference in their entirety for all
purposes.

BACKGROUND OF THE INVENTION

I. Field of the Invention

20 The present invention relates to data communication. More particularly,
the present invention relates to a novel and improved communications system
employing multi-carrier modulation and having high efficiency, improved
performance, and enhanced flexibility.

II. Description of the Related Art

25 A modern day communications system is required to support a variety
of applications. One such communications system is a code division multiple
access (CDMA) system that conforms to the "TIA/EIA/IS-95 Mobile Station-
Base Station Compatibility Standard for Dual-Mode Wideband Spread
30 Spectrum Cellular System," hereinafter referred to as the IS-95 standard. The
CDMA system supports voice and data communication between users over a
terrestrial link. The use of CDMA techniques in a multiple access
communication system is disclosed in U.S. Patent No. 4,901,307, entitled
"SPREAD SPECTRUM MULTIPLE ACCESS COMMUNICATION SYSTEM
35 USING SATELLITE OR TERRESTRIAL REPEATERS," and U.S. Patent No.
5,103,459, entitled "SYSTEM AND METHOD FOR GENERATING
WAVEFORMS IN A CDMA CELLULAR TELEPHONE SYSTEM," both
assigned to the assignee of the present invention and incorporated herein by
reference.